

Internal Questions and Answers for Final Water Quality Standards for Coastal and Great Lakes Recreation Waters

DEFINITIONS

What is the BEACH Act?

The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 amends the Clean Water Act to better protect public health at our Nation's beaches. The BEACH Act requires states and territories to adopt more protective water quality standards for pathogens and pathogen indicators in coastal recreational waters. The BEACH Act also requires EPA to take action, as we are in this final rule, if states fail to adopt appropriate water quality standards for coastal recreation waters. Appropriate standards are at least as protective of human health as EPA's 1986 bacteria criteria. The BEACH Act also provide grants for monitoring of coastal recreation waters and public notification. Finally, the BEACH Act includes provisions related to studies on pathogen indicators and revision of recreational water quality criteria based on those studies.

What are coastal recreation waters?

The BEACH Act defines coastal recreation waters as the Great Lakes and marine coastal waters (including coastal estuaries) that states, territories, and tribes designate in their water quality standards for use for swimming, bathing, surfing, or similar water contact activities.

REQUIREMENTS OF THE FINAL RULE

Why is EPA establishing Federal water quality standards for coastal and Great Lakes recreation waters?

EPA is publishing Federal health-based water quality criteria for those states and territories bordering Great Lakes or coastal waters that have not yet adopted the criteria and standards required by the Beaches Environmental Assessment and Coastal Act of 2000 (the BEACH Act). For those states and territories that have not adopted such criteria, the BEACH Act directs EPA to promptly propose them for that state or territory. The Clean Water Act also requires that EPA publish final water quality standards 90 days after proposal. EPA published the proposed rule on July 9, 2004.

What does the BEACH Act require for water quality standards?

The BEACH Act requires states and territories with coastal recreation waters to adopt water quality criteria for bacteria as protective of human health as the criteria published by EPA under §304(a) of the Clean Water Act. This statutory provision refers to EPA's *Ambient Water Quality Criteria for Bacteria*-1986.

Why do Great Lakes states have the choice between using enterococci or *E. coli*?

EPA's 1986 bacteria criteria document allows criteria for either enterococci or *E. coli* because they are equally protective in fresh waters. Giving the Great Lakes states the flexibility to choose either indicator is consistent with the 1986 criteria document.

How did EPA determine which states have water quality standards that meet BEACH Act requirements?

EPA compared the states' and territories' water quality criteria to the 1986 bacteria criteria, along with any information that the states and territories provided about their standards, in order to assess their protectiveness.

Which states and territories have adopted criteria "as protective of human health as" EPA's 1986 bacteria criteria?

Fourteen states and territories have adopted bacteria criteria that are "as protective of human health as" EPA's 1986 bacteria criteria: Alabama, American Samoa, Commonwealth of Northern Mariana Islands, Connecticut, Delaware, Guam, Indiana, Michigan, New Hampshire, New Jersey, South Carolina, Texas, Virginia and Washington.

Which states and territories does EPA include in this final rule?

EPA is publishing federal water quality criteria for all or some waters in 21 states and territories:

Alaska	Maine	Ohio
California	Maryland	Oregon
Florida	Massachusetts	Pennsylvania
Georgia	Minnesota	Puerto Rico
Hawaii	Mississippi	Rhode Island
Illinois	New York	U.S. Virgin Islands
Louisiana	North Carolina	Wisconsin

Some states and territories have adopted water quality criteria as protective of human health as EPA's bacteria criteria for some of their coastal recreation waters, but not all. In addition, some states and territories are now in the process of adopting revised water quality criteria.

What is the same and what has changed from the proposed rule to the final rule?

In most ways the final rule is identical to the proposed rule. For example, the final rule maintains the same geometric means and single sample maximum criteria values for *E. coli* and enterococci as were proposed for purposes of beach monitoring and notification and it maintains the same position as proposed with regard to including non-human source bacteria as well as human source bacteria. Changes between the proposed and final rule include: (1) the exclusion of four additional states/territories (Delaware, Washington, South Carolina, and the Commonwealth of Northern Mariana Islands) whose water quality standards have since proposal been determined to be "as protective of human health as" EPA's 1986 bacteria criteria, (2) additional flexibility EPA is expressly allowing states and territories with regard to the use of the promulgated single sample maximum values in the implementation of their assessment, TMDL and NPDES permitting programs under the Clean Water Act, and (3) EPA's decision to allow the Great Lakes

states to choose either enterococci or *E. coli* as their water quality standard, consistent with the 1986 bacteria criteria document.

I understand that Washington has not adopted enterococci criteria but is using a fecal coliform criterion of 14/100 ml for primary contact coastal recreational waters. Why is Washington excluded from this final rule?

The State of Washington submitted to EPA extensive paired monitoring data for fecal coliform and enterococci that were collected at many locations in their coastal recreational waters (the Puget Sound, the Strait of Juan de Fuca, and the Pacific Ocean). EPA carefully and thoroughly reviewed and analyzed these data and found that for these waters, a very low fecal coliform geometric mean of 14/100ml was as protective of human health as EPA's recommended enterococci criteria.

What will happen if, after the final rule, a state or territory adopts into its standards criteria that are as protective of human health as EPA's 1986 bacteria criteria?

When a state or territory adopts and submits to EPA new criteria as protective of human health as EPA's 1986 bacteria criteria, EPA will approve those criteria and they will become effective for making Clean Water Act decisions.

Is this rule legally applicable to non-coastal, or inland, recreational waters?

No. The rule is applicable to only coastal recreational waters. Section 502(21) of the Clean Water Act explicitly excludes from the definition of coastal recreation waters "inland waters; or water upstream of the mouth of a river or stream having an unimpaired natural connection with the open sea." EPA will approve pathogen standards for inland waters if the standards submitted by states to EPA for approval are found to be scientifically defensible for protecting the uses of these waterbodies. Parts of states with only inland waters are not subject to the BEACH Act requirements.

Does EPA plan to require all states and territories to adopt these criteria?

Although EPA continues to recommend that states and territories adopt these criteria for all their waters, including inland waters, the requirements of the BEACH Act only apply to coastal and Great Lakes recreation waters. EPA will continue to work with states and territories to ensure their other recreational waters are appropriately protected.

Do any coastal or Great Lake states have more stringent standards than what EPA requires through this rule?

Yes, some do have more stringent standards. For example, the State of Maine has a more stringent geometric mean concentration. This rule allows existing, more stringent, parts of state and territorial water quality standards to continue to apply.

Why are the criteria needed for waters that are too cold for – or aren't used for – swimming?

If a State or Territory has designated waters for primary contact recreational uses, Section 303(i) of the Clean Water Act requires these criteria for these waters. If a State or Territory believes that the water temperature prevents swimming or water recreation during the colder months, the

State or Territory can adopt a seasonal recreation use for the warmer months, and the criteria would only apply during the warmer months.

When do municipalities need to comply with these criteria?

The criteria are part of water quality standards, and do not themselves require compliance by municipalities. When the NPDES permitting authorities (mostly states) reissue permits, EPA expects that the permits will contain limits that assure that the waters receiving municipal discharges will achieve the criteria. Permitting authorities can give the municipalities time to comply with new permit requirements using a compliance schedule. The rule allows states to include compliance schedules in permits.

Are these criteria legally enforceable?

The criteria are not directly enforceable. However these criteria are part of the applicable water quality standards. EPA expects that states and territories will use the flexibility described in today's rule as they apply water quality standards in developing NPDES permits and TMDLs.

What will be the required monitoring methodology?

This rule does not require any monitoring. EPA's National Beach Guidance and Performance Criteria for Grants provides information on developing beach monitoring and notification programs. EPA is developing additional guidance and technical tools to assist states and territories in their beach monitoring methodology.

Why did EPA choose to use a geometric mean for assessing water quality, when FDA and USDA use an arithmetic mean for food safety microbiology?

EPA observed that the incidence of illness tends to be related to the geometric mean more so than the arithmetic mean. In other words, the geometric mean better characterizes risk.

How should the single sample maximum component of the criteria be implemented?

The single sample maximum must be used as a value not to be exceeded in beach monitoring and notification programs. For all other Clean Water Act applications, states and territories may choose how to implement the single sample maximum component, as long as the implementation achieves the geometric mean criterion.

If the single sample maximum value is exceeded in beach waters, must a beach advisory or closure be issued?

EPA requires this for beaches where the states and territories use BEACH Act grant funds for pathogen monitoring and notification. There is no legal requirement outside of the BEACH Act grants that states or territories must issue a beach advisory or closing if the single sample maximum is exceeded.

Will each state be required to develop their own site-specific single sample maximum?

What if a states chooses to develop their own?

No. States can either use the promulgated single sample maximum values or develop their own single sample maxima for specific waterbodies using the equations in the final rule.

SCOPE OF THE FINAL RULE

How many miles of beaches will be affected by this rule?

The rule applies to state-designated recreational waters along the Atlantic and Pacific Ocean coastlines, the Gulf of Mexico coastline, and the Great Lakes coastline. EPA is still determining how many miles of beaches this constitutes. States and territories have identified approximately 6,100 beaches along these coastlines.

How many miles of beaches are in tribal lands?

EPA is in the process of determining the miles of beaches in tribal lands. Forty tribes are located next to either coastal or Great Lakes waters. None of them have coastal recreation waters as defined by the BEACH Act.

STATE AND MUNICIPAL IMPACTS

Will applying the new criteria result in more beach closings?

It depends on the state or territory. There may be an increase in the number of advisories posted at some beaches and a decrease at others. Some states and territories already use the criteria for making decisions to close beaches even though some states and territories have yet to adopt the criteria into their water quality standards. Whether the number of posted advisories increases or decreases, the important thing to remember is that these criteria offer better information to beach managers and swimmers about the risk than did the previously recommended fecal coliform criteria of 200/100mL.

Will it be costly for all cities and towns to meet these criteria?

No. Some cities and towns will be able to meet these criteria without any additional costs. Other cities and towns may need to improve the disinfection process at their wastewater pollution control plants to meet discharge permit limits based on the new criteria. EPA evaluated 59 cities and towns for potential compliance costs, based on conservative assumptions that overstate costs, about how permit writers might implement these criteria. EPA found that 17 of these cities and towns may incur compliance costs ranging from \$3,700 to \$2.7 million per municipality. These costs represent less than 0.5% of revenues collected by these cities and towns. In comparison to those costs, EPA estimates that Americans spend about \$44 billion at beaches every year.

Does the rule encourage states to implement the criteria in a way that will have severe implications for municipalities, especially those with combined sewer overflows?

No. EPA recognized based on comments on the proposed rule that there was a need to be clear about what was intended with regard to the use of the single sample maximum values in the context of the implementation of Clean Water Act programs such as TMDLs and NPDES permits. In the context of CSO events, some comments expressed serious concerns about the potentially severe economic consequences to municipalities associated with the application of the SSMs as “never to-be-exceeded values.” Accordingly, EPA has clarified that the 1986 EPA recommended criteria document did not recommend the use of the single sample maximum values for other than beach monitoring and notification purposes. Moreover, in the final rule, EPA is providing states with flexibility with regard to how they use the promulgated single

sample maximum values in the implementation of their Clean Water Act Programs such as TMDLs and NPDES permits. EPA does not expect state permitting authorities, in general, to apply the single sample maximum values as “never to-be-exceeded” values.

OTHER IMPACTS FROM THE RULE

What are the benefits of this final rule?

From a human health standpoint, the rule provides greater assurance that American families will have more accurate information about bacteriological safety at beaches, and, because these standards are more protective than existing water quality standards, American families can be more confident that additional actions will be taken by states and municipalities to reduce concentrations of these bacteria in coastal waters. The use of better indicators will provide beach managers with better information upon which to make decisions about health risks at beaches and that improved data will likely spur investigations into upstream pollution sources so that future beach contamination can be prevented.

From an economic standpoint, EPA has not quantified the direct benefits of healthy beaches to Americans. However, EPA estimates that Americans take a total of 910 million trips to coastal areas each year and spend about \$44 billion at those beach locations.

My state hasn't adopted EPA's criteria and I am going to the beach. Is my beach safe?

The best way to obtain information about the safety of a beach is to contact local public health officials. Officials at the state and local level make public health decisions about beach use, and in many cases are in fact monitoring for *E. coli* or enterococci and making decisions regarding beach safety--even though the state may not yet have adopted these criteria into their water quality standards.

REACTIONS TO THE RULE

What do states and territories say about the rule?

State and territorial representatives are most concerned about EPA promulgating a criterion that is 18 years old while, at the same time, developing the next generation of new and improved criteria. They are also concerned that the rule will not allow states and territories sufficient flexibility to cost-effectively operate their water protection programs.

What is EPA's response to states' and territories' criticisms of the rule?

The BEACH Act requires EPA to publish its 1986 criteria for states and territories that have not yet adopted the 1986 criteria now, so EPA must take this action. EPA recognizes and understands state concerns for sufficient flexibility. Where it could, EPA discussed this issue in the rule preamble that points to flexibility and has clarified in the preamble to the final rule areas of state flexibility, particularly around the use of the single sample maximum values.

What do municipalities say about the rule?

Municipalities are concerned that the single sample maximum might be applied as a number that can never be exceeded, rather than as a trigger for decision-making. If their concerns were accurate, this would drastically increase the cost of compliance.

What is EPA's response to municipalities' concern about the single sample maximum?

EPA explains in the preamble to the final rule that the 1986 criteria did not envision the single sample maximum being applied for CWA purposes in the manner that they fear and that from EPA's perspective, the single sample maximum is not required to be applied as a value "never to-be-exceeded" for purposes of implementation of CWA programs such as TMDLs and NPDES permitting.

What do environmental groups say about the rule?

Environmental groups will be supportive of EPA promulgating the criteria but may be concerned about EPA's interpretation of the single sample maximum component and EPA's acceptance of the Washington fecal coliform criterion of 14/100ml as being as "as protective of human health as" EPA's bacteria criteria for enterococci.

The single sample maximum must be used as a value not to be exceeded in beach monitoring and notification programs. For all other Clean Water Act applications, states and territories may choose how to implement the single sample maximum component, as long as the implementation achieves the geometric mean criterion.

The State of Washington submitted to EPA extensive paired monitoring data for fecal coliform and enterococci that were collected at many locations in their coastal recreational waters (the Puget Sound, the Strait of Juan de Fuca, and the Pacific Ocean). EPA carefully and thoroughly reviewed and analyzed these data and found that for these waters, a very low fecal coliform geometric mean of 14/100ml was as protective of human health as EPA's recommended enterococci criteria.

BACTERIA CRITERIA and PATHOGEN INDICATORS

What are EPA's current water quality criteria for bacteria?

EPA's current water quality criteria for bacteria use the "indicator organisms" *E. coli* and enterococci. Most disease-causing microbes exist at very low levels and are difficult and expensive to detect. Indicator organisms have been used for more than a century to help identify where fecal contamination has occurred and, therefore, where disease-causing microbes may be present. These organisms generally do not cause illness directly; however, they have characteristics that make them good indicators that fecal contamination has occurred and that harmful pathogens may be in the water. EPA set the level for *E. coli* in freshwater at 126/100mL. EPA set the levels for enterococci at 33/100mL in freshwater and 35/100mL in marine water.

Why did EPA develop these criteria?

In the late 1970s and early 1980s, EPA conducted studies considering several organisms as possible indicators, including fecal coliforms, *E. coli*, and enterococci. EPA found that enterococci was a very good predictor of illness in all waters, and *E. coli* was a very good predictor in fresh waters. As a result, EPA recommended in 1986 the use of *E. coli* for fresh recreational waters and enterococci for fresh and marine recreational waters. This rule is based on these 1986 recommendations.

What are pathogen indicators?

Generally, the levels of disease-causing microbes (pathogens) in water are very low and difficult to measure. As a result, EPA and other public health agencies use indicator organisms to identify where fecal contamination has likely occurred and where disease-causing microbes that threaten human health may be present. Specifically, EPA recommends using the indicator organisms of *E. coli* and enterococci. These organisms generally do not cause illness directly, but they have characteristics, such as rates of growth similar to the pathogens of concern, that make them good indicators of harmful pathogens in waterbodies.

Have new or recent studies affected EPA's recommended water quality criteria for bacteria?

The Agency reviewed its original studies and 11 peer-reviewed studies in the literature on human health research conducted since the original studies. EPA examined these studies to determine if they supported EPA's indicator relationship findings or if using different indicator bacteria consistently showed quantitatively better predictive abilities. Based on these reviews, EPA did not see any new or unique principles that might significantly affect the current guidance EPA recommends for maintaining the microbiological safety of marine and freshwater bathing beaches. Many of the studies have, in fact, confirmed and validated the findings of the U.S. EPA studies.

Are EPA's 1986 recommended water quality criteria for bacteria obsolete?

EPA's 1986 water quality criteria for bacteria still represent the best available science and are a defensible foundation for protecting public health in recreational waters. However, as required by the BEACH Act, EPA is currently developing new bacteria criteria by conducting new epidemiological studies to investigate faster detection methods and new indicators.

What are EPA's plans to update the criteria?

EPA is now developing new water quality criteria for the protection of swimmers, based on new epidemiological studies which EPA is conducting. This multi-year effort, required by BEACH Act, is being undertaken by EPA's Office of Research and Development.

What is EPA doing to address weaknesses with the 1986 bacteria criteria?

As required by the BEACH Act, EPA is developing new pathogen criteria. In addition, the Agency reviewed its original studies and 11 peer-reviewed studies in the literature on human health research conducted since the original studies. EPA examined these studies to determine if they supported EPA's indicator relationship findings or if using different indicator bacteria consistently showed quantitatively better predictive abilities. Based on these reviews, there are

no new or unique principles that might significantly affect EPA's current guidance for maintaining the microbiological safety of marine and freshwater bathing beaches. Many of the studies have, in fact, confirmed the EPA's findings.

Why are the risk levels in the 1986 criteria document different for marine and fresh waters?

When EPA developed the 1986 criteria, the Agency made the decision to recommend *E. coli* and enterococci criteria that were no more stringent than the then existing fecal coliform criteria. EPA calculated the values of enterococci and *E. coli* that correlated to the fecal coliform criteria. These calculations resulted in different illness rates for fresh water and marine water. The value of the criteria also reflect the point at which there was a statistically significant difference in illness between bathers and non-bathers.

EPA's risk assessment appears to have thoroughly considered risk of gastrointestinal illness. But does the Agency's risk assessment adequately consider other possible consequences from exposure to contaminated water?

The 1986 bacteria criteria only considered gastrointestinal illness. EPA is looking at other illness indicators as part of our commitment to develop new science on the effects of pathogens on human health.

Since all the disciplines of microbiology and bacteriology are still evolving, has EPA adequately considered *all* possible bacterial indicator species?

One of the purposes of EPA's epidemiological studies was to determine which indicator(s) best predicted swimming related illnesses in contaminated waters. To that end, EPA evaluated ten different indicators that were being used or for which there were studies supporting their uses. Of those ten, *E. coli* and enterococci were found to be the best predictors of illness.

Are the current levels of acceptable risk for gastrointestinal illness adequate for adults, children, and the elderly?

EPA designed the 1986 criteria to protect all age groups. EPA's studies included children, with the number of children under age 10 between 15% and 25% of the total study population. Children in the age range 10 to 19 years old made up a slightly higher percentage of the study population. During the studies, information on gastroenteritis, respiratory symptoms, and other symptoms were collected for all participants, including children.

What is the concern about animals and wildlife?

Recent studies suggest there may be some risk to humans as a result of exposure of non-human fecal contamination, particularly those animal sources with which humans regularly come into contact (e.g., livestock and domestic animals). Livestock, domestic pets and wildlife are carriers of human pathogens and can transmit them to surface waters. They can also contribute significant numbers of indicator bacteria to waterbodies. For example, outbreaks caused by *E. coli* O157:H7, salmonella, *Giardia*, and cryptosporidium are frequently of animal origin.

CSOs and SSOs

What is sewage?

Sewage is the wastewater from homes and businesses that is transported for treatment through sewer pipes intended for that purpose. Sewage includes anything that reaches the sewers from sinks, toilets, and other appliances that use water. Sewage also includes wastewater from industrial facilities, which generally pretreat their wastewater prior to releasing it to sewers.

What is a CSO?

A combined sewer system is a wastewater collection system, owned by a state or municipality, that is specifically designed to collect and convey sanitary wastewater (domestic sewage from homes as well as industrial and commercial wastewater) and storm water through a single pipe. These were the earliest sewers to be built in the United States, and they continued to be built until the middle of the twentieth century. During precipitation events (e.g. rainfall or snowmelt), the systems are designed to overflow when collection system capacity is exceeded, resulting in a combined sewer overflow (CSO) that discharges directly to surface waters. These discharges contain fecal contamination. Some CSOs occur infrequently; others, with every precipitation event. As point sources, CSOs are subject to the technology- and water quality-based requirements of the CWA. They are not, however, subject to the secondary treatment standards that apply to publicly owned treatment works (POTWs).

How many CSOs are there in the United States?

Today, there are 746 communities with combined sewer systems with a total of 9,348 CSO outfalls that are identified and regulated by 828 NPDES permits. Combined sewer systems are found in 32 states (including the District of Columbia) and nine EPA Regions. CSO communities are regionally concentrated in older communities in the Northeast and Great Lakes regions. EPA estimates that about 850 billion gallons of untreated wastewater and storm water are released as CSO each year in the United States.

What is an SSO?

A sanitary sewer system is a wastewater collection system, owned by a state or municipality, that is specifically designed to collect and convey only sanitary wastewater (domestic sewage from homes as well as industrial and commercial wastewater). In such systems, storm water is conveyed through an additional set of pipes. These systems can overflow when collection system capacity is exceeded due to wet weather (as the result of infiltration and inflow), when normal dry weather flow is blocked for any of several reasons, or when mechanical failures prevent the system from proper operation.

How many SSOs are there in the United States?

EPA estimates that between 23,000 and 75,000 SSOs occur each year in the United States, resulting in releases of between 3 billion and 10 billion gallons of untreated wastewater. These events take place throughout the United States.

What impacts do SSOs have?

Because SSOs contain raw sewage and can occur on land and in public spaces, SSOs can create public health and environmental concerns. SSOs have contributed to beach closures, contamination of drinking water supplies, and other environmental and public health concerns.

How do CSOs/SSOs impact beach water quality?

CSOs and SSOs contaminate receiving streams with pathogens. If the CSOs and SSOs discharge water close to beaches, they can impact beach water quality.

Concurrent with this final rule, will EPA be providing funding for research to better understand pathogen occurrence in areas affected by CSOs?

EPA is funding epidemiology studies in the Great Lakes. Some of these areas are affected by CSOs.

Could the controversial proposed blending policy increase rather than decrease the risk of pathogens in beach water?

EPA does not believe that the proposed blending policy would increase the risk of pathogens in beach water. The proposed blending policy will provide local officials with better information and better options for managing high flows to sewage treatment plants caused by storm events. During periods of heavy rainfall, high flows to sewage treatment plants can exceed the capacity of certain parts of the treatment system, particularly the biological or "secondary treatment" units.

The proposed blending policy would continue to require compliance with established NPDES permit limits while providing local officials with more flexibility to maximize the capacity of various parts of the sewage treatment system without jeopardizing the sensitive secondary units. By doing so, local officials can increase the volume of wastewater that is treated by the entire facility and, thereby, prevent overflows of raw sewage elsewhere in the system. The proposed blending policy also includes monitoring to appropriately reflect the nature of blended discharges.

What is EPA doing to control SSOs since this Administration is not moving forward with the proposed control rule?

EPA and the states are continuing to address SSO problems using a variety of approaches, including implementation of the Compliance and Enforcement Strategy Addressing Combined Sewer Overflows and Sanitary Sewer Overflows (issued April 27, 2000). This strategy has resulted in a number of enforcement actions to address SSOs, including actions in Los Angeles, Washington DC, San Diego, Kansas City, St. Louis and other cities.

Recently, EPA completed a comprehensive survey of CSOs and SSOs and their impacts. The new "Report to Congress: Impacts and Control of CSOs and SSOs" summarizes the characteristics, human health and environmental impacts, and the resources spent and technologies used by municipalities to reduce their impacts. This Report also establishes a baseline of data for regulatory agencies to use in policy making related to the management of sewer collection systems. Based on this information, EPA is considering policy options for improving the management of CSOs and SSOs nationwide.

CLEAN WATER STATE REVOLVING FUND

What is the Clean Water State Revolving Fund (CWSRF)?

The Clean Water State Revolving Fund (CWSRF) program, which replaced the Construction Grants program, is the primary source of federal funding for the construction of municipal wastewater facilities and implementation of nonpoint source pollution control and estuary protection projects.

Since SSOs and CSOs are such major contributors to contamination, what funding will EPA provide to state governments to better manage these sources of contamination?

EPA indirectly provides funding for controlling CSOs and SSOs through its capitalization of the Clean Water State Revolving Fund (CWSRF). This is the primary source of federal funding for CSO and SSO control. Other federal grant programs that have and can be used for CSO and SSO control are the Rural Utilities Service Grant Program, the Economic Development Administration Grant Program and the Community Development Block Grants. These grant programs are only available to small and economically disadvantaged communities. Currently, 28 states have grant programs specifically to help communities implement CSO projects.

Since the passage of the Clean Water Act, great progress has been made toward restoring the nation's waters. States, local governments, nonprofit organizations and others will continue to find financial assistance through flexible federal programs that are designed to address current and future water pollution control challenges. Today, the CWSRF program is recognized as the most successful federal water quality funding program in the nation's history. The CWSRF program, which replaced the Construction Grants program, provides funding for the construction of municipal wastewater facilities and implementation of nonpoint source pollution control and estuary protection projects. Since 1988, the CWSRF has made available about \$50 billion for wastewater infrastructure. In 2003, CWSRFs provided \$1.1- billion in loans to communities for SSO (\$425 million) and CSO (\$660 million) projects. This represents almost 25% of total loan volume in 2003 (\$4.4 billion).

How can a \$500 million cut to the Clean Water State Revolving Fund help improve coastal water quality?

The Clean Water State Revolving Fund (CWSRF) is a key element of the Administration's clean water policy. In 2003, the Administration committed to funding the CWSRF at \$850 million annually through 2011. The Administration's proposal provides an additional six years of funding totaling \$5.1 billion. This extended capitalization period will significantly increase the CWSRF program's capability to fund projects in both the near and long term over the previous Administration's commitment.

- The CWSRF is the primary source of Federal funding for protecting coastal and Great Lake recreational waters. In 2003, the 31 States that border these waters and operate CWSRFs provided almost \$4 billion to communities to protect human health by mitigating contamination of these resources.
- The CWSRF plays an important role in correcting the overflows from sanitary and combined sewers, a major contaminant of beaches and coastal recreation waters. In 2003, CWSRFs provided \$1.1 billion in loans to communities for CSO and SSO correction.

Communities received \$8 billion to fund these projects since the program's foundation in 1989.

- EPA has provided more than \$21 billion to capitalize the CWSRF, more than twice the original Clean Water Act authorized level of \$8.4 billion.
- The CWSRF reached a watershed mark this year. Working in partnership with the States, this year the program celebrates reaching \$50 billion in funds generated since its foundation in 1989. This large volume of funds for addressing community wastewater needs reflects Federal and State contributions supplemented with leveraged funds and repayments.
- Annual assistance provided to CWSRF loan recipients now surpasses \$4.2 billion per year. Over time, this represents a two-fold return on the Federal investment.
- EPA recognizes that providing adequate support for addressing the Nation's wastewater needs requires actions and innovations to reduce the demand for infrastructure, including better management, conservation (or smart water use), full-cost pricing, and intergovernmental cooperation through the watershed approach. Through a sustainable infrastructure initiative, the Agency is working in partnership with States, the utility industry, and other stakeholders to enhance the operating efficiencies of wastewater systems.

BEACH GRANTS

Why hasn't EPA awarded all the 2004 Beach Grant funds?

Many states are now completing their BEACH grant application package for EPA review and approval. EPA expects to completely distribute these funds by the end of the year. As in the past, states will use this money for next year's beach monitoring and notification.

Why hasn't EPA requested the total amount of \$30 million per year authorized by the Congress for Beach grants?

EPA has requested \$10 million annually for beach program implementation since 2002. EPA views this as adequate funding for states to establish and territories begin to implement their monitoring and notification programs for coastal recreation waters.

What is the status of beach grant spending?

All 35 eligible states and territories have been using grants to develop and implement their beach monitoring and public notification programs. Some states developed their programs earlier and are fully utilizing their grants. In many cases these are states that had improved their established, though limited, beach programs. The program development and implementation process has taken longer for some other states. EPA has awarded many of the 2004 BEACH grants and we expect to award almost all of them by the end of October.

Can states use their beach grants to develop and adopt their pathogen standards?

No. The BEACH Act allows EPA to give grants to states and territories only for beach monitoring and notification programs.

OTHER EPA EFFORTS TO PROTECT COASTAL WATER QUALITY

How does this rule relate to the Clean Beaches Plan?

This rule is part of a larger effort to further protect the water quality of the Nation's beaches and to ensure compliance with the BEACH Act. In addition to these Federal water quality standards that backstop state and territorial efforts, the Administration's Clean Beaches Plan includes grants to states and territories for beach monitoring and notification programs, technical guidance, and scientific studies.

What other actions is EPA taking to protect coastal water quality?

On September 20, 2004, the U.S. Commission on Ocean Policy (Commission) submitted its final report, *An Ocean Blueprint for the 21st Century*, to the President and Congress. The Administration has 90 days from that date to submit a response to Congress. EPA shares the Commission's interest and concern about protecting and enhancing our ocean and coastal resources. The Commission endorses a watershed approach to protecting coastal resources. The final report also calls for increased water quality monitoring. The Commission's themes align closely with EPA's water quality priorities.

How will the watershed approach help to improve coastal water quality?

For more than a decade, EPA has emphasized watershed protection to address water quality problems. EPA and the states currently have numerous efforts underway that reflect a watershed approach to protecting water quality, including the health of our oceans and coasts.

How will the watershed approach address polluted runoff?

The Commission's final report calls for reducing water pollution, particularly polluted runoff. EPA works with the states to implement Clean Water Act programs to control polluted runoff on a watershed basis. For example, the new Section 319 grant guidelines call for expanding efforts to manage nonpoint source pollution on a watershed basis through the development and implementation of watershed plans. In addition, within a watershed, various water segments often are impaired by the same pollutant. For these waters, EPA is encouraging states to develop TMDLs on a watershed basis. And, in February 2003, EPA issued new Clean Water Act effluent limitation guidelines and permitting regulations for certain concentrated animal feeding operations (CAFOs). Under these new rules, approximately 18,500 CAFOs nationwide will be required to obtain NPDES permits by 2006. This requirement is expected to greatly reduce the amount of nutrients and sediments entering coastal waters.

What is the National Estuary Program?

The National Estuary Program (NEP) is one of EPA's most successful watershed program. This success demonstrates the effectiveness of a stakeholder-driven, collaborative process to address water quality problems. While many ocean programs are focused on developing improved

scientific understanding, the 28 NEPs focus on achieving environmental results. For example, since the year 2000, the NEPs collectively have protected and restored nearly 900,000 acres of habitat.

How does the NEP address coastal pollution and land-based pollution sources?

The NEPs help us address the connection between coastal pollution and land-based pollution sources, including polluted runoff, through the linkage with such land-based programs as the Clean Water Act Section 319, NPDES, and TMDL programs.

What is the Targeted Watersheds Grants Program?

In addition to implementing Clean Water Act programs on a watershed basis, EPA also supports local watershed efforts in critical watersheds. For example, EPA is expanding support for protection of key watersheds through its Targeted Watersheds Grants Program. This competitive grant program provides needed resources to those watershed organizations whose restoration plans set clear goals and objectives with special consideration given to water quality monitoring, innovative technologies, market incentives, results-oriented strategies, and strong community support. Since 2003, more than \$30 million has been provided to support these community-driven approaches to clean water goals.

How is EPA supporting water quality monitoring and assessment?

Data collection is another area where the Ocean Commission report aligns with EPA priorities. For both EPA and the states, water quality monitoring and assessment is a program need and priority. The tool for collecting and analyzing the data needed to determine the ecological health of ocean and coastal waters is the National Coastal Condition Report (NCCR). It was developed by EPA in conjunction with NOAA and the Department of the Interior, with much of the data collected by states. The NCCR tells us about the condition of our coastal waters on a regional and national scale. The first NCCR was issued in 2002. An updated version of the report, based on newer, more complete data, is scheduled to be issued by the end of the calendar year. The NCCR serves as a model for expanded monitoring of the Nation's waters.